

## MOTION ESTIMATION METHOD USING MULTILEVEL SUCCESSIVE ELIMINATION ALGORITHM

### Abstract of the Disclosure

The present invention provides a motion estimation method using a multilevel successive elimination algorithm. The present invention includes the steps of: a) selecting an initial candidate block among a plurality of candidate blocks in an image frame for computing an initial SAD; b) selecting four vertex candidate blocks placed at vertexes of a imaginary perfect square based on the initial candidate block as the center of the imaginary perfect square; c) extracting elimination levels of the four vertex candidate blocks by performing the MSEA; d) predicting elimination levels for side candidate blocks which are located at sides of the perfect square based on a spatial correlation between elimination levels of candidate blocks and the extracted elimination levels of the four vertex candidate blocks; and e) extracting elimination levels of the side candidate blocks by performing the MSEA based on the predicted elimination level.

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